ENVIRONMENTAL CHEMISTS

Date of Report: 11/25/98 Date Received: 11/19/98

Project: Metro Self Monitor, PO# M77717

Date Samples Extracted: 11/23/98 Date Extracts Analyzed: 11/23/98

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

Sample ID	<u>Chromium</u>	Copper	<u>Nickel</u>	Zinc
M77717	0.38	0.34	0.39	0.08
Method Blank	< 0.05	< 0.05	< 0.05	< 0.05

ENVIRONMENTAL CHEMISTS

Date of Report: 11/25/98 Date Received: 11/19/98

Project: Metro Self Monitor, PO# M77717

QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 811097-01 (Duplicate)

				neia	uve		
	Reporting	Sample	e Duplica	ate Perc	ent	Acceptan	.ce
Analyte	 Units	Result	Resu	lt Differ	ence	Criteria	ì
Chromium	mg/L (ppm)	0.38	0.35	8		0-20	10.5
Copper	mg/L (ppm)	0.34	0.31	9		0-20	
Nickel	mg/L (ppm)	.0.39	0.38	3		0-20	
Zinc	mg/L (ppm)	0.08	0.07	18	3	0-20	

Laboratory Code: 811097-01 (Matrix Spike)

	Reporting	Spike	Sample	% Recov	ery % Recov	ery Acceptance	
Analyte	Units	Level	Result	MS	MSD	Criteria	RPD
Chromium	mg/L (ppm)	5	0.38	90	81	80-120	11
Copper	mg/L (ppm)	5	0.34	91	80	80-120	12
Nickel	mg/L (ppm)	10	0.39	89	82	80-120	8
Zinc	mg/L (ppm)	5	0.08	94	86	80-120	9

Laboratory Code: Laboratory Control Sample

	Reporting	Spike	% Recove	ry % Recove	ery Acceptance		
Analyte	Units	Level	LCS	LCSD	Criteria	RPD	
Chromium	mg/L (ppm)	5	102	100	80-120	2	7.7
Copper	mg/L (ppm)	5	103	103	80-120	0	
Nickel	mg/L (ppm)	10	102	100	80-120	2	
Zinc	mg/L (ppm)	5	102	101	80-120		

#811097

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282



SAMPLE CHAIN OF CUSTODY

Send Report To: Company Address 628 How	· · ·				0	_	
Company / / //S/	CAN COPPER	Works	z.	Contac	t Sek	LALD Thomps	2
	*CO15C						
City, State, Zip Sand Phone # 266-382-8	te wa						
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7288		Metro Se	IS mo	midon	m	77717	
SAMPLERS (signature)				-140.0		PROJECT LOCAT	ION
Sun 9.9					320		
REMARKS				<u>-</u>		MPLE DISPOSAL INFO	DRMATION
						Dispose after 30 da	
						Return Samples	.,,,
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_	Date/Time	Type of	# of	Lab		Analyse	
Sample #	Sampled	Sample	Jars	Sample #	1	Requeste	
W 77717	11-15-98 mg	HO	1	01		CK Cu W;	· EJ
			-	·			
O'COLL MILITARY							
SIGNATURE Relinquished by:	PI	NAME		COMPANY		Date	Time
XIntellan	- GERAS	o Thompson	٠ ,	A.C.u)	11/2/28	1:45
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Relinquished by:	L-40	- / - /		- SAN KIND	<u>, ~ </u>	1 1 1 1 1 1	
Received by:							

FORMS/COC

11/07/98

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

November 25, 1998

DUPLICATE COPY

INVOICE #98ACU1125-1

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M77717: Results of testing requested by Gerry Thompson for material submitted on November 19, 1998.

1 water sample analyzed for	
Chromium, Copper, Nickel, and Zinc	
using Method 6010 @ \$65 per sample	\$ 65.00
Amount Due	\$ 65.00

FEDERAL TAX ID (b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

November 25, 1998

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on November 19, 1998 from your Metro Self Monitor, PO# M77717 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Manuel Marti Project Manager

Enclosures ACU1125R.DOC